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THE GENERA APENESIA AND DISSOMPHALUS IN ARGENTINA AND CHILE (HYMENOPTERA, BETHYLIDAE)

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ABSTRACT. *Apenesia* and *Dissomphalus*, two of the three genera of Pristocerinae occurring in Argentina and Chile, have been known from those countries from only a few specimens representing 5 species. Recent use of Malaise traps has greatly increased the available material and has made a further study of these genera desirable. In *Apenesia*, 12 species are here reported from Argentina, 6 of them new; 2 species are reported from Chile, 1 of them new. In *Dissomphalus*, 9 species are reported from Argentina, 8 of them new; this genus has not been collected in Chile. Keys to species are presented and important taxonomic features are illustrated.

This is a supplement to two papers published in the Bulletin of the Museum of Comparative Zoology.¹ It covers recently collected material of two of the three genera of the subfamily Pristocerinae occurring in southern South America. The remaining genus, *Pseudisobrachium*, has been treated elsewhere.²

Most of the material reported on here was taken by Dr. Lionel Stange in Malaise traps in the province of Tucumán, Argentina. The value of these traps as faunal samplers is shown by the fact that *Apenesia* was previously known from Argentina from two species represented by 7 specimens; in the present paper 12 species are reported, 6 of them new, these species known from over 150 specimens. *Dissomphalus* was previously known from Argentina from 3 species; 9 additional species are here reported from that country, 8 of them new. The figures for *Pseudisobrachium* are even more impressive: previously known from Argentina from only 4 species, each represented by only one or a few specimens, this genus is now

¹ Bull. Mus. Comp. Zool., 130: 249-359 (1963).

Bull. Mus. Comp. Zool., 132: 1-222 (1964).

² Acta Zoologica Lilloana (in press).

known from 22 species, represented in all by several hundred specimens. Altogether, the number of known species of Pristocerinae in Argentina has been increased from 9 to 48, the number in Chile from 0 to 3. Material quite recently collected by Dr. Stange near Tucumán and by Charles C. Porter in several localities has consisted wholly of these same species, suggesting that a fairly high percentage of the species occurring in the areas sampled is now known.

A discussion of the terminology employed will be found in the papers cited earlier. The abbreviations used are listed here for the sake of ready reference:

- DAO: diameter of anterior ocellus (transversely)
- HE: height of eye (maximum, lateral view)
- LFW: length of fore wing
- LH: length of head (frontal view, including clypeus but not mouthparts)
- OOL: ocello-ocular line (minimum distance between lateral ocelli and nearest eye margin)
- WF: width of front (at minimum point, between eyes)
- WH: width of head (full frontal view, including eyes)
- WOT: width of ocellar triangle (including lateral ocelli).

All the material discussed in this paper is in the collections of the Instituto Miguel Lillo, Tucumán, Argentina, and of the Museum of Comparative Zoology, Cambridge, U.S.A. All holotypes have been deposited in the Instituto Miguel Lillo.

GENUS *APENESIA* WESTWOOD

This genus has been known from 35 species in South America, to which 7 more species are added here. All South American species are presently known from only one sex, and this unfortunate situation will prevail until these insects are reared in series from their hosts or taken in copula. No females of the genus *Apenesia* are as yet recorded from Argentina or Chile. In the treatment that follows, arrangement of the species-groups follows my 1963 revision.

KEY TO MALE *Apenesia* KNOWN FROM ARGENTINA AND CHILE

1. Pronotal disc without a transverse carina anteriorly 2
 Pronotal disc with a transverse carina anteriorly 10
2. Eyes glabrous; clypeus with a median lobe, not prominent on the sides
 (Figs. 10-13) 3

- Eyes hairy; clypeus large, well developed on sides, and without a distinct median lobe (Figs. 7-9) (*dissomphaloides* group) 8
3. Abdomen with a distinct, moderately long petiole; LFW 2.1-2.4 mm (*laevigata* group) 9. *crenulata* (Kieffer)
- Abdomen sessile; LFW exceeding 3 mm 4
4. Propodeum with no evidence of a transverse carina margining the disc behind; pronotum very short, strongly sloping (*exilis* group) 8. *chilena* Evans
- Propodeum with a transverse carina margining the disc behind; pronotum longer and with a more or less flat dorsal surface 5
5. Antennae with erect setae on the under surface, which stand out strongly above the pubescence (most noticeable on segments 4-7) (*pilicornis* group) 6
- Antennae with erect setae sparse and standing out slightly if at all above the prominent, bristling pubescence (*columbana* group) 7
6. Transverse carina of propodeum complete, median carina also complete and reaching transverse carina; LFW 3.3-3.5 mm 1. *angusticeps* Evans
- Transverse carina of propodeum obsolescent in middle, median carina not nearly reaching posterior margin of disc; LFW 4.0-5.6 mm 2. *reducta* Evans
7. Ocelli of moderate size; OOL at least as great as WOT; head about as wide as high 3. *flammicornis* Evans
- Ocelli greatly enlarged; OOL about half WOT; head considerably wider than high 4. *photophila* (Ogloblin)
8. Mandibles broad, with four teeth (Fig. 23); clypeus with a sharp median tooth but no additional processes (Fig. 9); notauli present only on anterior half of mesoscutum 7. *pygmaea* n. sp.
- Mandibles slender, with two or three teeth; clypeus with a small median tooth flanked by two rounded processes (Figs. 7, 8); notauli complete 9
9. Mandibles bidentate (Fig. 21); punctures of front small but quite distinct; legs testaceous 5. *lilloana* n. sp.
- Mandibles tridentate (Fig. 22); front obscurely punctate; coxae and femora medium brown 6. *simulata* n. sp.
10. Abdomen sessile, first tergite broadly reaching articulation with propodeum; mandibles with three large teeth (Fig. 24); inner margin of volsella with only a few setae just below cuspis (*mexicana* group) . .11
- Abdomen short-petiolate, first tergite not reaching extreme base; mandibles with 4 or 5 teeth (Figs. 25, 26); inner margin of volsella setose for a considerable distance (*brasiliensis* group) 12
11. Clypeus broadly subangulate (as in Fig. 12); antennae elongate, the pubescence short and subappressed; head and thorax polished, non-alutaceous 10. *laevicornis* n. sp.
- Clypeus truncate or bidentate apically (Fig. 10); antennae shorter, with suberect pubescence; head and thorax somewhat alutaceous 11. *inca* Evans

12. Clypeus short, broadly truncate (Fig. 13); mandibles with four teeth (Fig. 26); front polished, non-alutaceous, strongly punctate 14. *spinipes* n. sp.
 Clypeus more prominent, subangulate (Figs. 11, 12); mandibles with five teeth (Fig. 25); front somewhat alutaceous, punctures small and widely spaced 13
13. Ocelli enlarged, DAO .20-.22 $\times$ WF, OOL .80-.95 $\times$ WOT; mesoscutum evenly alutaceous; parameres not highly modified (Fig. 4) 12. *spatulata* n. sp.
 Ocelli not or but slightly enlarged, DAO .16 to .20 $\times$ WF, OOL at least slightly exceeding WOT; mesoscutum not or obscurely alutaceous, at least medially; parameres each divided into two separate lobes (Fig. 5) 13. *lacerata* n. sp.

1. *Apenesia angusticeps* EVANS

This species has been known from one male from Santa Cruz, Bolivia. Five Argentinian males are similar to the type in color and sculpture. However, the antennae are somewhat shorter (segment three 1.6-1.9 $\times$ as long as wide, segment eleven about twice as long as wide) and the front is somewhat broader (WF 1.1-1.3 $\times$ HE). LFW varies from 3.2 to 3.8 mm.

Specimens examined. — ARGENTINA: 1 ♂, Horco Molle, Tucumán, 3-10 April 1966 (L. Stange); 2 ♂♂, Horco Molle, Oct., Dec. 1967 (C. C. Porter); 1 ♂, 11 km W Las Cejas, Tucumán, 1-21 Feb. 1968 (L. Stange); 1 ♂, San Pedro Colalao, Tucumán, Nov.-Dec. 1967 (L. Stange).

2. *Apenesia reducta* EVANS

This species has been known from a single male from Chapada, Brazil. Twenty-three males now before me key well to this species if allowance is made for the fact that in about half the specimens the very small fourth mandibular tooth is altogether absent. In some specimens the tip of the abdomen is weakly suffused with brown, while in others the last two segments are rufous as in the type. All these specimens are larger than the type (LFW 4.2-5.6 mm) except for the two from Tucumán, which are slightly smaller (LFW 3.6-3.9 mm). Throughout this series, the propodeum is broader than in the type (disc 1.2-1.4 $\times$ as wide as long), although similar in sculpturing.

Specimens examined. — ARGENTINA: 2 ♂♂, 11 km W Las Cejas, Tucumán, Jan.-Feb. 1968 (L. Stange); 5 ♂♂, Oran, Abra Grande, Salta, 29 Jan.-7 Feb. 1967 (R. Golbach); 4 ♂♂, Rio Pescado, Salta, 19-25 Nov. 1967 (C. Porter, E. Willink). PARAGUAY: 12 ♂♂, Carumbé, 1 Feb.-8 March 1966 (R. Golbach).

3. *Apenesia flammicornis* EVANS

This species was described from Santa Cruz, Bolivia, and later reported from Jujuy, Argentina.³ Nine additional males from northern Argentina compare favorably with the type, but some are smaller (LFW 4.0-5.5 mm), and there is considerable variation in some standard measurements (OOL 1.05-1.40 $\times$ WOT; WF 1.05-1.20 $\times$ HE).

Specimens examined. — ARGENTINA: 7 ♂♂, Oran, Abra Grande, Salta, 29 Jan.-7 Feb. 1967 (R. Golbach); 2 ♂♂, Rio Pescado, Salta, 19-25 Nov. 1967 (C. Porter, E. Willink).

4. *Apenesia photophila* (OGLOBLIN)

This species is known from a series from Loreto, Misiones, Argentina. It is closely related to the preceding, but has much larger ocelli and a reddish abdomen. I redescribed the species in my 1963 revision of this genus.

5. *Apenesia lilloana* NEW SPECIES

Holotype. — ♂, ARGENTINA: Horco Molle, San Xavier Mts., Tucumán, 1-7 May 1966 (L. Stange).

Description of type. — Length 2.6 mm; LFW 2.4 mm. Head black; thorax and propodeum fusco-castaneous; abdomen castaneous, irregularly banded with light brown, base of first segment piceous; mandibles in large part testaceous; first two antennal segments testaceous, remainder of antenna dark brown; legs testaceous, coxae and femora weakly suffused with darker brown; wings subhyaline, with dark setulae, veins and stigma brown. Head, thoracic dorsum, venter, and basal parts of legs clothed with dense, short hair. Mandibles slender, bidentate (Fig. 21). Clypeus large, well developed in front of antennal sockets, below which there are large, semicircular depressions; median carina sharply defined, nearly straight in profile, forming a small median tooth at its terminus, this tooth flanked by two small, rounded processes, so that the clypeus is weakly tridentate (Fig. 7). Antennae very slender, scape elongate, first four segments in a ratio of about 3:1:1:1, segments three and eleven each nearly 3 $\times$ as long as wide; flagellar pubescence erect, bristling, setulae nearly as long as width of flagellum. Eyes hairy, somewhat protuberant; WH .97 $\times$ LH; vertex broadly rounded, nearly straight in middle; distance from eye tops to vertex crest somewhat less than eye height. WF 1.25 $\times$ HE; ocelli not notably enlarged, in a compact triangle, the front angle less than

³ Evans, H. E., *Acta Hymenopterologica*, 2: 103 (1966).

a right angle; OOL $1.3 \times$ WOT. Front strongly alutaceous, weakly shining, with an abundance of shallow but well-defined punctures. Thoracic dorsum wholly alutaceous, obscurely punctate; pronotum short, without a transverse carina; notauli linear, complete, curved somewhat mesad posteriorly. Propodeum of moderate length, with a somewhat irregular transverse carina along the top of the declivity, the median carina not quite reaching this transverse carina; surface strongly reticulate basally, polished apically; disc measuring $1.1 \times$ as long as wide. Mesopleura alutaceous, without a well-defined callus. Fore wing with the discoidal vein strongly pigmented for a distance greater than length of basal vein. Abdomen very slender at base, subpetiolate; subgenital plate broadly truncate; genitalia with the aedoeagus terminating in two simple lobes, the parameres with a lateral, digitiform process (Fig. 1).

Paratypes. — 4 ♂♂, same data as type except various dates March-July 1966, 1967 (L. Stange).

Variation. — The paratypes vary slightly in size (LFW 2.3-3.2 mm); WH/LH varies from .92 to .98, WF/HE from 1.15 to 1.25, OOL/WOT from 1.15 to 1.25. There is no noteworthy variation in color or sculpture.

Remarks. — I would assign this species to the *dissomphaloides* species-group, previously known from Mexico and the southwestern United States, although it will not run to that group in my revision of *Apenesia* (1963) because of the presence of a transverse carina on the propodeum. However, the hairy eyes, tridentate clypeus, and male genitalia all suggest that it belongs in that group. The two species that follow are closely related to *lilloana* and these remarks apply equally well to them.

6. *Apenesia simulata* NEW SPECIES

Holotype. — ♂, ARGENTINA: Horco Molle, San Xavier Mts., Tucumán, 4-12 Jan. 1966 (L. Stange).

Description of type. — Length 3.0 mm; LFW 2.6 mm. Head, thorax, and base of first abdominal segment black; remainder of abdomen dark castaneous, irregularly banded with light brown; mandibles in large part testaceous; clypeus dull ferruginous; first two antennal segments testaceous, remainder of antenna dark brown; legs medium brown except trochanters, tarsi, and femoro-tibial joints paler; wings subhyaline, with dark setulae, veins and stigma brown. Head, thoracic dorsum, venter, and basal parts of legs clothed with short, brownish hair. Mandibles slender, tridentate (Fig. 22). Clypeus much as in *lilloana*, but the median tooth very small and flanked by two fairly large, rounded processes (Fig. 8).

First four antennal segments in a ratio of about 16:5:6:5, segments three and eleven each about $2.5 \times$ as long as wide; flagellar pubescence erect, bristling, setulae nearly as long as width of flagellum. Eyes hairy, strongly protuberant; WH $.96 \times$ LH; sides of head roundly convergent behind eyes; occipital carina unusually strong, readily visible for a considerable length when head is viewed from front. Front broad, WF $1.4 \times$ HE; ocelli small, in a compact triangle far above eye tops, OOL $1.55 \times$ WOT. Front moderately alutaceous, somewhat shining, punctures small and shallow, separated by $2-4 \times$ their own diameters. Thoracic dorsum alutaceous, obscurely punctate; notauli strong, complete. Propodeal disc slightly longer than wide, with a well-defined transverse carina behind; sculpturing similar to that of preceding species. Features of mesopleura and wings as in *lilloana*, and abdomen subpetiolate as in that species. Subgenital plate broadly emarginate apically; genitalia similar to those of *lilloana* but the parameres simple, the aedocagus with prominent ventral rami and with elongate apical lobes which are serrate on their inner margins (Fig. 2).

Paratypes. — 6 ♂♂, same data as type except various dates Jan.-May 1966 (L. Stange).

Variation. — LFW varies from 2.2 to 2.9 mm, WH/LH from .95 to .97, WF/HE from 1.30 to 1.45, OOL/WOT from 1.3 to 1.6. In the majority of specimens the propodeal disc is about as long as wide.

7. *Apenesia pygmaea* NEW SPECIES

Holotype. — ♂, CHILE: Queb. de la Plata, Rinconada Maipú, Santiago Prov., 510 meters, 26 Dec. 1966 (L. Stange).

Description of type. — Length 1.8 mm; LFW 1.6 mm. Head and thorax dark brown, abdomen somewhat lighter brown except base of first tergite black; apical half of mandibles light brown; antennae dark brown except second segment testaceous; legs brown, tarsi and apices of tibiae somewhat lighter than remainder; wings hyaline, with dark setulae, veins and stigma brown. Head and thorax dorsum with rather dense short, brownish setae. Mandibles with a large apical tooth and three small, sharp teeth above it (Fig. 23). Clypeus large, well developed in front of antennal insertions, with a median tooth but no additional irregularities; median carina very strong basally, then abruptly declivous to apex (Fig. 9). Antennae very slender, first four segments in a ratio of about 7:4:3:4, segments three and eleven each about $3 \times$ as long as wide; flagellar pubescence suberect, bristling, setulae about as long as width of flagellum. Eyes small but strongly convex, hairy;

WH $.97 \times$ LH; vertex broadly rounded, distance from eye tops to vertex crest subequal to eye height. WF $1.25 \times$ HE; ocelli small, widely spaced, front angle of ocellar triangle less than a right angle; OOL $1.3 \times$ WOT. Front alutaceous although rather strongly shining, obscurely punctate. Thoracic dorsum also alutaceous, somewhat shining; pronotum unusually short, without a transverse carina; mesoscutum with a few small punctures medially, notauli strong on anterior half, absent behind; scutum longitudinally depressed on each side. Propodeum elongate, with a weak, incomplete carina margining the disc behind; disc $1.3 \times$ as long as wide, with a long median carina and several short, radiating carinae basally. Features of mesopleura and wings as in preceding species; subgenital plate truncate as in that species; genitalia not studied.

Remarks. — I have seen only one specimen of this minute species, but since it is the second species of the genus known from Chile, it seems worth describing at this time. The other Chilean species, *chilena*, is much larger and has a very different clypeus, glabrous eyes, larger ocelli, and several other prominent differences.

8. *Apenesia chilena* EVANS

I described this species from one specimen from Pichinahuel, Arauco, Chile.⁴ I have seen no additional specimens, nor have I seen other South American species closely related to it. I assigned the species tentatively to the *exilis* group, known otherwise from the southern United States.

9. *Apenesia crenulata* (KIEFFER)

This very distinctive species has been known only from the type, from Pará, Brazil. Two specimens before me agree well with the type but are both slightly smaller (LFW 2.1-2.2 mm) and have the ocelli less far removed from the eyes (OOL $1.1-1.2 \times$ WOT); both have propodeal sculpturing generally similar to that of the type, but the median carina is well defined.

Specimens examined. — ARGENTINA: 1 ♂, Oran, Abra Grande, Salta, 29 Jan.-7 Feb. 1967 (R. Golbach). BRAZIL: 1 ♂, Nova Teutonia, Santa Catarina, Feb. 1964 (F. Plaumann).

10. *Apenesia laevicornis* NEW SPECIES

Holotype. — ♂, ARGENTINA: 11 km W Las Cejas, Tucumán, 13 July-2 Aug. 1967 (L. Stange).

Description of type. — Length 3.8 mm; LFW 3.2 mm. Head and thorax black; abdomen dark castaneous, irregularly mottled

⁴ Proc. Ent. Soc. Washington, 69: 271 (1967).

with lighter brown; mandibles black except suffused with dull ferruginous on apical third; antennae very dark brown; legs dark brown except tarsi somewhat paler; wings hyaline, with pale setulae, veins and stigma brown. Body setae relatively sparse and long. Mandibles with three large apical teeth (Fig. 24). Clypeus broadly subangulate, median part somewhat tectiform but not carinate (as in Fig. 12). Antennae slender, first four segments in a ratio of about 14:4:9:8, segment three $3 \times$ as long as wide, segment eleven $3.5 \times$ as long as wide; flagellar pubescence short, subappressed, a few slightly longer, erect setulae standing above it. Eyes with scattered short setae, only slightly protuberant; vertex broadly rounded off well above eye tops; WH $.97 \times$ LH. Front broad, WF $1.47 \times$ HE; ocelli small, widely spaced, in a right triangle; OOL $1.25 \times$ WOT. Front strongly polished, non-alutaceous, punctures strong, rather irregularly spaced, mostly separated by $5-8 \times$ their own diameters. Thoracic dorsum also wholly non-alutaceous, strongly polished, sparsely punctate; pronotum with a transverse carina on the anterior slope; notauli and parapsidal furrows strong, nearly complete. Propodeal disc as long as wide, with a complete median carina and a rather irregular transverse carina; basal part of disc alutaceous and with strong reticulations, apical part smooth and shining. Mesopleura wholly polished, non-alutaceous, very sparsely punctate. Discoidal vein of fore wing very weakly developed, arising a short distance down on transverse median vein. Abdomen sessile; subgenital plate arcuately emarginate; aedoeagus complex although nearly parallel-sided; ventral arms of cuspides narrowly rounded; parameres with a rounded apical enlargement (Fig. 3).

Remarks. — This unusual species is known from a single specimen. It is a member of the *mexicana* group, similar to *neotropica* Evans in many details, but with longer and smoother antennae, a much broader and more polished front, and smaller ocelli.

11. *Apenesia inca* EVANS

This distinctive species was described from Peru and Ecuador in 1963; in 1966 I recorded it from two localities in eastern Brazil. Nineteen Argentinian males have the usual tridentate mandibles and bidentate clypeus (Fig. 10), as well as genitalia resembling those of the type closely. LFW varies from 2.7 to 3.8 mm, WF from 1.0 to $1.2 \times$ HE; in the majority of specimens OOL is subequal to or even slightly less than WOT.

Specimens examined. — ARGENTINA: 19 ♂♂, 11 km W of

Las Cejas, Tucumán, Sept., Nov., Dec., Jan., Feb., 1967-68 (L. Stange).

12. *Apenesia spatulata* NEW SPECIES

Holotype. — ♂, ARGENTINA: Horco Molle, Tucumán, 7-26 March 1967 (L. Stange).

Description of type. — Length 4.8 mm; LFW 4.0 mm. Head, thorax, and abdominal petiole black; remainder of abdomen dark castaneous with irregular banding with lighter brown; apical half of mandibles testaceous, teeth rufous; antennae medium brown except second segment light brown; legs entirely testaceous; wings subhyaline, with dark setulae, vein and stigma dark brown. Mandibles broad, with five strong teeth (Fig. 25). Clypeus broadly subangulate, its median line tectiform but not carinate (Fig. 11). First four antennal segments in a ratio of about 20:7:10:10, segment three $2.5 \times$ as long as wide, segment eleven $3 \times$ as long as wide; flagellar pubescence pale, suberect, majority of setulae about .7 as long as width of flagellum. Eyes large, somewhat protuberant, glabrous; WH $1.03 \times$ LH; vertex forming a broad, even arc above eye tops. WF $1.1 \times$ HE; ocelli large, less than their diameters apart, front ocellus located on an imaginary line drawn between eye tops; DAO $.22 \times$ WF; OOL $.85 \times$ WOT. Front wholly alutaceous, weakly shining, punctures small but sharply defined, separated for the most part by 3-5 $\times$ their own diameters. Pronotal disc margined in front by a transverse carina, weakly alutaceous and with scattered, minute punctures; mesoscutum also weakly alutaceous, shining, with punctures slightly stronger than on pronotum; notauli nearly complete. Propodeum elongate, the disc margined behind by a series of fine transverse ridges, disc measuring slightly longer than wide; median carina complete, disc also reticulate medio-basally. Mesopleurum wholly weakly alutaceous, obscurely punctate anteriorly. Middle tibiae strongly spinose above. Discoidal cell of fore wing weakly outlined, the discoidal vein itself strongly pigmented for a distance about equal to basal vein. Abdomen petiolate, but the petiole very short; subgenital plate truncate; aedocagus complex; ventral lobes of cuspides spatulate, narrowly rounded apically, parameres with a broad, subquadrate lobe which is directed mesad (Fig. 4).

Paratypes. — 20 ♂♂, same data as type but various dates Jan.-July 1966 (L. Stange).

Variation. — In the paratypes, LFW varies from 3.2 to 4.1 mm, WH from 1.03 to $1.06 \times$ LH, WF from 1.05 to $1.20 \times$ HE, OOL

from .80 to .95 $\times$ WOT, DAO from .20 to .22 $\times$ WF. There is no noteworthy variation in other characters.

Remarks. — This species is a member of the *brasiliensis* group, apparently related to *angustata* (Evans). The species name refers to the large, spatulate lobes of the cuspis.

13. *Apenesia lacerata* NEW SPECIES

Holotype. — δ , ARGENTINA: 11 km. W of Las Cejas, Tucumán, 16-29 April 1967 (L. Stange).

Description of type. — Length 3.3 mm; LFW 3.0 mm. Head, thorax, and abdominal petiole piceous; remainder of abdomen dark castaneous, irregularly banded with lighter brown; mandibles testaceous, darker at extreme base and apex; antennae testaceous basally, grading into medium brown beyond segment three; legs wholly testaceous; wings hyaline. Mandibles with five teeth (as in Fig. 25); clypeus broadly subangulate, tectiform medially (Fig. 12). First four antennal segments in a ratio of about 18:5:10:9, segment three 3 $\times$ as long as wide, segment eleven 3.5 $\times$ as long as wide; flagellar pubescence suberect, nearly as long as width of flagellum. Eyes weakly hairy, slightly protuberant; WH 1.03 $\times$ LH; vertex forming a broad, even arc above eye tops. WF 1.22 $\times$ HE; ocelli slightly enlarged, DAO .17 $\times$ WF; front ocellus slightly above a line connecting eye tops; OOL 1.1 $\times$ WOT. Front wholly alutaceous, somewhat shining; punctures small, separated by 3-5 $\times$ their own diameters. Pronotum strongly polished, non-alutaceous, the disc margined in front by a transverse carina; mesoscutum strongly polished, very weakly alutaceous laterad of the very strong, complete notauli. Propodeal disc as wide as long, sculptured exactly as in the preceding species. Mesopleurum shining, barely alutaceous, strongly punctate in front. Discoidal vein of fore wing very weakly outlined by pigmented lines. Abdominal petiole very short; subgenital plate subtruncate; genitalia of unusual form in that the ventral arms of the cuspides are very long and pointed, the parameres deeply divided into a slender process and an enlarged mesal lobe (Fig. 5).

Paratypes. — 17 δ δ , same data as type but various dates July-Nov. 1967 and Jan., Feb., May 1968 (L. Stange).

Variation. — LFW varies from 3.0 to 3.3 mm, WH from .98 to 1.03 $\times$ LH, WF from 1.12 to 1.30 $\times$ HE, DAO from .16 to .20 $\times$ WF, OOL from 1.1 to 1.2 $\times$ WOT. In the majority of paratypes the propodeal disc is longer than wide. In a few specimens the front coxae and femora are suffused with brown. In two specimens the mesoscutum is somewhat alutaceous, even medially.

Remarks. — This species resembles the preceding closely, and I would be inclined to consider the two conspecific if it were not for the distinctive genitalia. The name *lacerata* refers to the greatly dissected parameres of the genitalia of this species.

14. *Apenesia spinipes* NEW SPECIES

Holotype. — ♂, ARGENTINA: 11 km W of Las Cejas, Tucumán, 3-19 June 1966 (L. Stange).

Description of type. — Length 4.3 mm; LFW 3.5 mm. Head and thorax black, abdomen dark castaneous with lighter markings along margin of first tergite as well as apically; mandibles testaceous except teeth rufous; antennae wholly testaceous, legs also of this color except coxae and femora suffused with brown; wings hyaline, veins and stigma dark brown. Mandibles with four large apical teeth (Fig. 26). Clypeus very short, broadly truncate (Fig. 13). First four antennal segments in a ratio of about 4:1:2:2, segments three and eleven each about $3 \times$ as long as wide; flagellar pubescence erect, pale, setulae about one third as long as width of flagellum. Eyes very weakly hairy; vertex forming a broad, even arc above eye tops, distance from eye tops to vertex crest nearly equal to HE. WH $1.02 \times$ LH; WF $1.2 \times$ HE; ocelli small, in a compact triangle, OOL $1.4 \times$ WOT. Front polished, non-alutaceous, with strong punctures which are separated by only $1-2 \times$ their own diameters. Thoracic dorsum polished, non-alutaceous; pronotal disc with a strong transverse carina in front, its surface covered with small punctures except along a median band. Mesoscutum with scattered, sharply defined punctures; notauli strong, complete; scutellar disc impunctate medially. Propodeal disc $1.2 \times$ as wide as long, the transverse carina weak although complete, median carina also complete; disc reticulate medio-basally, elsewhere strongly polished and smooth; posterior face shining, with a few punctures and some medial roughening, but no median carina. Mesopleurum in large part smooth and polished, the callus convex. Middle tibiae very strongly spinose. Discoidal cell of fore wing weakly outlined by pigmented lines, the subdiscoidal vein more heavily pigmented than the discoidal vein. Abdomen short-petiolate; subgenital plate truncate; genitalia with the aedocagus narrowed subapically, with a pair of curved apical processes; ventral arms of cuspides large, rounded; parameres with broad mesal lobes (Fig. 6).

Paratypes. — 41 ♂♂, same data as type except various dates May, Aug., Oct., Dec., 1967; Jan., Feb., 1968 (L. Stange).

Variation. — Several specimens have the coxae and femora more heavily infuscated than in the type, and the apical third of the antennae may also be somewhat infuscated. LFW varies from 2.7 to 4.2 mm, WH/LH from 1.01 to 1.05, WF/HE from 1.10 to 1.25, OOL/WOT from 1.20 to 1.45.

Remarks. — This species runs to *brasiliensis* (Kieffer) in my 1963 key, although the transverse carina of the propodeum is not as strong. The genitalia are very different from those of *brasiliensis* and the sculpturing of the basal triangle of the propodeum quite different.

GENUS *DISSOMPHALUS* ASHMEAD

Seventeen species of this genus have so far been described from South America, and 8 more are added here. I would estimate that there are at least 2 to 4 times that many species on that continent, even though some synonymy will be discovered when the sexes are properly associated. The following three species are known from Argentina from the female sex and are not treated here: *attaphila* (Bruch), *azarai* (Ogloblin), and *platensis* (Bruch). This genus has not yet been found to occur in Chile

KEY TO MALE *Dissomphalus* KNOWN FROM ARGENTINA

- 1. Second abdominal tergite with two large, pubescent pits close together medially and sharing a common depression (Figs. 16, 17) 2
Second abdominal tergite not as above, containing two medium-sized to minute pits, marks, or processes which are separated by much more than their own length (Figs. 18-20) 3
- 2. Pronotum with a strong transverse ridge; second tergite with four pits, the two middle ones very large, the tergite swollen and distorted behind them (Fig. 16) 1. *deformis* n. sp.
Pronotum without a transverse ridge; second tergite with two somewhat smaller pits medially, the tergite not swollen and distorted behind them (Fig. 17) 2. *ulceratus* n. sp.
- 3. Notauli absent on posterior two-thirds of mesoscutum; mandibles with four teeth (Fig. 31) 6. *teren* n. sp.
Notauli complete; mandibles with 2 or 3 teeth 4
- 4. Second tergite with fairly large, round pits with raised rims (Fig. 18); subgenital plate with a large, V-shaped apical emargination; WF not exceeding HE 3. *puteolus* n. sp.
Second tergite with minute pits, slits, or processes; subgenital plate without a V-shaped emargination: WF exceeding HE 5
- 5. Clypeus tapering to a long, sharp median point (Fig. 15); WH only .9 X LH; second tergite with a pair of small, spatulate processes antero-medially 8. *bispinulatus* n. sp.

- Clypeus not so strongly pointed apically and WH subequal to HE; second tergite not modified as above 6
6. Second tergite smooth, with a pair of pale, roughened spots at extreme anterior margin laterally, but no other modifications; clypeus with a median process, not or very indistinctly tridentate. .9. *incomptus* Evans
Second tergite with small pits, slits, or processes not nearly so close to anterior margin (Figs. 19, 20); clypeus strongly tridentate (as in Fig. 14) 7
7. Modifications of second tergite in the form of oblique slits (Fig. 20); propodeal disc short, $1.7 \times$ as wide as long 7. *infissus* n. sp.
Modifications of second tergite in the form of minute pits or hair pencils (Fig. 19); propodeal disc $1.0-1.3 \times$ as wide as long. 8
8. LFW 1.8 mm; eyes and ocelli small, WF $1.2 \times$ HE, OOL $1.05 \times$ WOT; wings pale, discoidal vein unpigmented, basal vein suberect 4. *mendicus* n. sp.
LFW 2.6 mm; eyes and ocelli rather large, WF $1.1 \times$ HE. OOL only $.8 \times$ WOT; wings with dark veins and stigma, discoidal vein a short, brown streak, basal vein strongly oblique 5. *microstictus* n. sp.

1. *Dissomphalus deformis* NEW SPECIES

Holotype. — ♂, ARGENTINA: Oran, Abra Grande, Salta, 8-15 Feb. 1967 (R. Golbach).

Description of type. — Length 2.7 mm; LFW 2.4 mm. Head and thorax black; abdomen dark brown, suffused with lighter brown on parts of basal and apical segments; mandibles largely testaceous; antennae testaceous, suffused with brown on apical half; coxae and femora dark brown, hind tibiae medium brown, legs otherwise testaceous; wings hyaline. Mandibles tridentate, the middle tooth the smallest (Fig. 27). Clypeus tridentate, median carina strong, straight in profile (Fig. 14). First four antennal segments in a ratio of about 3:1:1:1, segment three $1.5 \times$ as long as wide, segment eleven twice as long as wide. Head as wide as high, the eyes large, convergent below; WF $1.1 \times$ HE; ocelli widely spaced, front angle of triangle less than a right angle; OOL $0.9 \times$ WOT. Front alutaceous although somewhat shining, covered with shallow punctures. Thoracic dorsum strongly alutaceous, obscurely punctate; pronotal disc crossed anteriorly by a very strong carina; notauli strong, complete. Propodeal disc $1.2 \times$ as wide as long, disc and declivity wholly coarsely reticulate. Discoidal vein of fore wing barely indicated. First tergite short, with a strong median groove for much of its length; second tergite with two very large, pubescent, elliptical pits close beside the midline, the tergite strongly gibbous behind and slightly laterad of these pits; second tergite also with a pair of much smaller pits in

addition, so that there are four pits in a transverse series; tergite with a median band of small setae behind the pits (Fig. 16). Subgenital plate broadly concave apically; parameres large, triangular in lateral view, subacute apically.

Paratypes. — 3 ♂♂, same data as type.

Variation. — The paratypes are all slightly larger than the type (LFW 2.5-2.7 mm) and all have the propodeal disc slightly shorter and wider ($1.25-1.35 \times$ as wide as long). There is no noteworthy variation in standard measurements or in the remarkable configuration of the second tergite.

2. *Dissomphalus ulceratus* NEW SPECIES

Holotype. — ♂, ARGENTINA: Horco Molle, San Xavier Mts., Tucumán, 1-7 May 1966 (L. Stange).

Description of type. — Length 2.0 mm; LFW 1.9 mm. Dark brownish-fuscous, sides of basal abdominal segments suffused with light brown; mandibles testaceous on apical half; mandibles dark brown except second segment somewhat lighter than remainder; coxae and femora dark brown, legs otherwise testaceous; wings hyaline. Mandibles tridentate, the uppermost tooth the smallest (Fig. 28). Clypeus with a strong median angulation and two small, rounded teeth beside it (much as in Fig. 7); median carina straight in profile. Third antennal segment $1.5 \times$ as long as wide. Head as wide as high, eyes not convergent below, front broad, WF $1.3 \times$ HE; ocellar triangle compact, OOL $1.2 \times$ WOT. Front alutaceous, somewhat shining, covered with shallow punctures. Thoracic dorsum alutaceous although somewhat shining; pronotum short, without a transverse carina; notauli complete. Propodeum short, disc measuring $1.35 \times$ as wide as long; disc mostly reticulate, but with a smooth area behind. Discoidal vein of fore wing present as a long but weakly pigmented streak. First tergite more rounded behind and with a shorter median groove than in *deformis*, and the second tergite not gibbous behind the pits as in that species; pits large, narrowly separated medially, sharing a common bowl-shaped depression, the tergite without other pits and with only a few scattered setae (Fig. 17). Subgenital plate broadly truncate.

Paratype. — 1 ♂, same data as type except 3-10 April 1966 (L. Stange).

Variation. — In the paratype, LFW is 2.0 mm, WF $1.4 \times$ HE. This specimen is closely similar to the type in every respect.

3. *Dissomphalus puteolus* NEW SPECIES

Holotype. — ♂, ARGENTINA: 11 km W of Las Cejas, Tucumán, 13-27 May 1967 (L. Stange).

Description of type. — Length 2.5 mm; LFW 2.1 mm. Head and thorax black; abdomen dark brown, with paler markings toward base and apex; mandibles in large part testaceous; scape medium brown, flagellum light brown; coxae and femora dark brown, remainder of legs light brown; wings hyaline. Mandibles with three strong apical teeth, the most basal tooth somewhat rounded (Fig. 29). Clypeus with a projecting median lobe which is tridentate (much as in Fig. 14). First four antennal segments in a ratio of about 10:4:3:3, segment three only slightly longer than wide, segment eleven $1.5 \times$ as long as wide. WH $1.02 \times$ LH; eyes large, strongly convergent below, WF only $.93 \times$ HE; ocelli widely spaced, OOL only $.8 \times$ WOT. Front alutaceous and strongly roughened by punctures which are separated by less than their own diameters. Thoracic dorsum alutaceous; pronotum short, without a transverse carina; mesoscutum somewhat shining, with numerous small punctures, notauli complete. Propodeal disc unusually short and broad, $1.7 \times$ as wide as long, surface reticulate except smooth over a small area behind. Discoidal vein of fore wing absent. First tergite relatively longer and second tergite shorter and less convex than in preceding two species; second tergite with a pair of fairly large, circular pits dorso-laterally, each pit in a depression, with a raised rim and giving rise to a small tuft of setulae; second tergite with numerous setae, especially laterad of the pits (Fig. 18). Subgenital plate with a strong, V-shaped apical emargination; parameres broad, tapering to an acute apex.

Paratypes. — 5 ♂♂, same data as type except various dates Jan., March, April, June, 1966-1968 (L. Stange).

Variation. — The paratypes are very similar to the type; LFW varies from 1.9 to 2.1 mm; all have the basal flagellar segments testaceous, contrasting with the darker apical segments; in two the propodeum is not quite as short as in the type, the disc measuring $1.6 \times$ as wide as long.

4. *Dissomphalus mendicus* NEW SPECIES

Holotype. — ♂, ARGENTINA: 11 km W of Las Cejas, Tucumán, 17 June-12 July 1967 (L. Stange).

Description of type. — Length 2.1 mm; LFW 1.8 mm. Head and thorax dark brownish-fuscous except pronotal collar medium

brown; abdomen dark castaneous except first tergite bordered with light brown, second tergite light brown on extreme sides; mandibles in large part testaceous; antennae dull brown except second segment and adjacent parts of first and third segments testaceous; legs brown, tarsi and femoro-tibial joints straw-colored; wings hyaline, with pale setulae and pale veins and stigma. Mandibles tridentate, the basal two teeth small (much as in Fig. 28). Clypeus as described for the preceding species. First four antennal segments in a ratio of about 5:2:2:2, segments three and eleven both about $1.5 \times$ as long as wide. WH and LH subequal; eyes weakly converging below, WF $1.2 \times$ HE; ocelli small, front angle of ocellar triangle less than a right angle, OOL $1.05 \times$ WOT. Front moderately alutaceous, shining, the punctures small and shallow, separated by $2-4 \times$ their own diameters. Thoracic dorsum alutaceous although somewhat shining; pronotum short, without a transverse carina; mesoscutum weakly punctate, notauli complete. Propodeal disc $1.25 \times$ as wide as long, surface reticulate. Discoidal vein of fore wing distinct for a short distance although barely pigmented. First tergite rounded behind, with a strong median groove; second tergite with a pair of minute lateral pits with raised rims, the pits occupying very shallow depressions and flanked by several setae (much as in Fig. 19). Subgenital plate broadly truncate apically.

Remarks. — This small but distinctive species is known from a single specimen.

5. *Dissomphalus microstictus* NEW SPECIES

Holotype. — ♂, ARGENTINA: 11 km W of Las Cejas, Tucumán, 3-19 June 1966 (L. Stange).

Description of type. — Length 3.0 mm; LFW 2.6 mm. Head black; thorax dark brownish-fuscous; abdomen dark castaneous, with paler markings basally and apically; mandibles in large part testaceous; antennae medium brown except segments two and three and apex of one testaceous; legs straw-colored except front and hind femora weakly suffused with brown; wings hyaline, with dark veins and stigma. Mandibles with two strong apical teeth (Fig. 30). Clypeus with a tridentate median lobe (much as in Fig. 14). Third and eleventh antennal segments both about twice as long as wide. WH and LH subequal; eyes prominent, short-haired, inner orbits subparallel on lower half; WF $1.1 \times$ HE; ocelli slightly enlarged, in about a right triangle, OOL only $.8 \times$ WOT. Front wholly strongly alutaceous, weakly shining, punctures very shallow,

separated by $1-3 \times$ their own diameters. Thoracic dorsum alutaceous although less strongly so than front; pronotum short, without a transverse carina; mesoscutum with scattered small punctures, notauli complete. Propodeal disc elongate, barely wider than long, disc smooth and shining behind, the median carina not reaching the transverse carina. Discoidal vein of fore wing lightly pigmented for a considerable distance. First tergite elongate, median groove confined to basal half; second tergite with a pair of widely spaced very small pits with raised rims, these pits in very shallow, broad depressions and flanked by a few setae (Fig. 19). Subgenital plate broadly, shallowly emarginate; parameres twisted mesad apically.

Paratypes. — ARGENTINA: 53 ♂♂, same data as type except various dates Nov.-Dec. 1967, Jan.-May 1968; 1 ♂, San Pedro Colalao, Tucumán, Jan. 1968 (L. Stange).

Variation. — LFW varies from 2.1 to 3.6 mm. The legs vary from wholly straw-colored to almost wholly brown. WF varies from 1.1 to $1.3 \times$ HE. The ocelli of some of the smaller specimens are only slightly enlarged, and in these specimens OOL is only slightly less than WOT. There is little variation in the form of the second tergite in this long series.

6. *Disсомphalus teren* NEW SPECIES

Holotype. — ♂, ARGENTINA: Horco Molle, San Xavier Mts., Tucumán, 3-11 June 1966 (L. Stange).

Description of type. — Length 1.8 mm; LFW 1.6 mm. Dark brownish-fuscous, including mandibles and antennae; legs dark brown except tarsi testaceous; wings hyaline, veins and stigma dark. Mandibles with four teeth, basal two teeth connate (Fig. 31). Clypeus tridentate, with a strong median carina (much as in Fig. 14). First four antennal segments in a ratio of about 10:4:3:3, segments three and eleven each about $1.5 \times$ as long as wide. Head elongate, vertex broadly rounded off far above eye tops; WH $.93 \times$ LH; WF $1.25 \times$ HE; front angle of ocellar triangle less than a right angle, OOL $1.3 \times$ WOT. Front weakly alutaceous, moderately shining, punctures small and shallow. Thoracic dorsum smooth, somewhat shining, obscurely punctate; pronotum without a transverse carina; notauli present on anterior third of mesoscutum, absent behind. Propodeal disc $1.3 \times$ as wide as long, with a transverse polished band posteriorly. Discoidal vein of fore wing weakly pigmented. First tergite rounded apically, with a median groove on the basal .6; second tergite smooth except for scattered small setae and a pair of curved hair-pencils which arise from slightly elevated bases, these located dorsally but separated by about twice the length of one of

the hair-pencils. Subgenital plate unusually broad, arcuately emarginate; parameres very slender apically, their tips directed mesad.

Remarks. — This species possesses a number of unique features: the 4-tooth mandibles, reduced notauli, and broadly emarginate subgenital plate. It is known only from the type specimen.

7. *Dissomphalus infissus* NEW SPECIES

Holotype. — ♂, ARGENTINA: Oran, Abra Grande, Salta, 16-23 Feb. 1967 (R. Golbach).

Description of type. — Length 3.2 mm; LFW 2.6 mm. Dark brownish-fuscos; mandibles in large part testaceous; antennae medium brown, dark brown beyond basal .4; front coxae, all femora, and hind tibiae dark brown, remaining coxae, trochanters, femora-tibial joints, middle and front tibiae, and all tarsi testaceous; wings subhyaline, with dark setulae and dark veins and stigma. Mandibles tridentate (much as in Fig. 28). Clypeus with a tridentate median lobe (much as in Fig. 14). First four antennal segments in a ratio of about 3:1:1:1, segments three and eleven each about $1.5 \times$ as long as wide. Head about as wide as high; front broad, WF $1.2 \times$ HE; vertex slightly emarginate behind ocellar triangle, the latter about a right triangle, OOL $1.15 \times$ WOT. Front strongly alutaceous, covered with shallow punctures which are separated by only $1-2 \times$ their own diameters. Pronotum short, roughened but not carinate along anterior margin of disc; mesoscutum somewhat shining, with scattered small punctures; notauli strong, complete. Propodeal disc short, $1.7 \times$ as wide as long, covered with coarse reticulations. Discoidal vein of fore wing interstitial with media, pigmented for a distance exceeding basal vein. First tergite rounded apically, with a strong median groove on basal half; second tergite with a pair of dorso-lateral slits with raised rims, each slit flanked by a group of setae (Fig. 20). Subgenital plate broadly truncate.

8. *Dissomphalus bispinulatus* NEW SPECIES

Holotype. — ♂, ARGENTINA: Oran, Abra Grande, Salta, 16-23 Feb. 1967 (R. Golbach).

Description of type. — Length 1.7 mm; LFW 1.5 mm. Dark brownish-fuscos; mandibles testaceous apically; antennae medium brown except basal three segments light brown; legs straw-colored except front coxae, all femora, and hind tibiae medium brown; wings hyaline, with dark setulae and dark veins and stigma. Mandibles with a large apical tooth and two minute teeth above it. Clypeus tapering medially to a long, acute process which is at the

terminus of a strong median ridge (Fig. 15). First four antennal segments in a ratio of about 9:4:3:3, segments three and eleven each about $1.5 \times$ as long as wide. Head elongate, WH only $.90 \times$ LH; eyes glabrous, inner orbits slightly diverging above and below middle; WF $1.17 \times$ HE; ocelli small, in an acute triangle, OOL $1.3 \times$ WOT. Front shining, weakly alutaceous, obscurely punctate. Pronotum much expanded from front to rear, sides concave as seen from above, without a transverse carina; mesoscutum weakly alutaceous, obscurely punctate, notauli complete. Propodeal disc $1.2 \times$ as wide as long, most of its posterior half smooth and shining, median carina not nearly reaching transverse carina. Discoidal vein of fore wing strongly pigmented for a considerable distance. First tergite rounded apically, with a median groove on basal half; second tergite with a pair of small, spatulate processes close behind the margin of the first tergite, these separated medially by about twice their own length; second tergite also with a pair of roughened spots anterolaterally. Subgenital plate very broadly truncate apically.

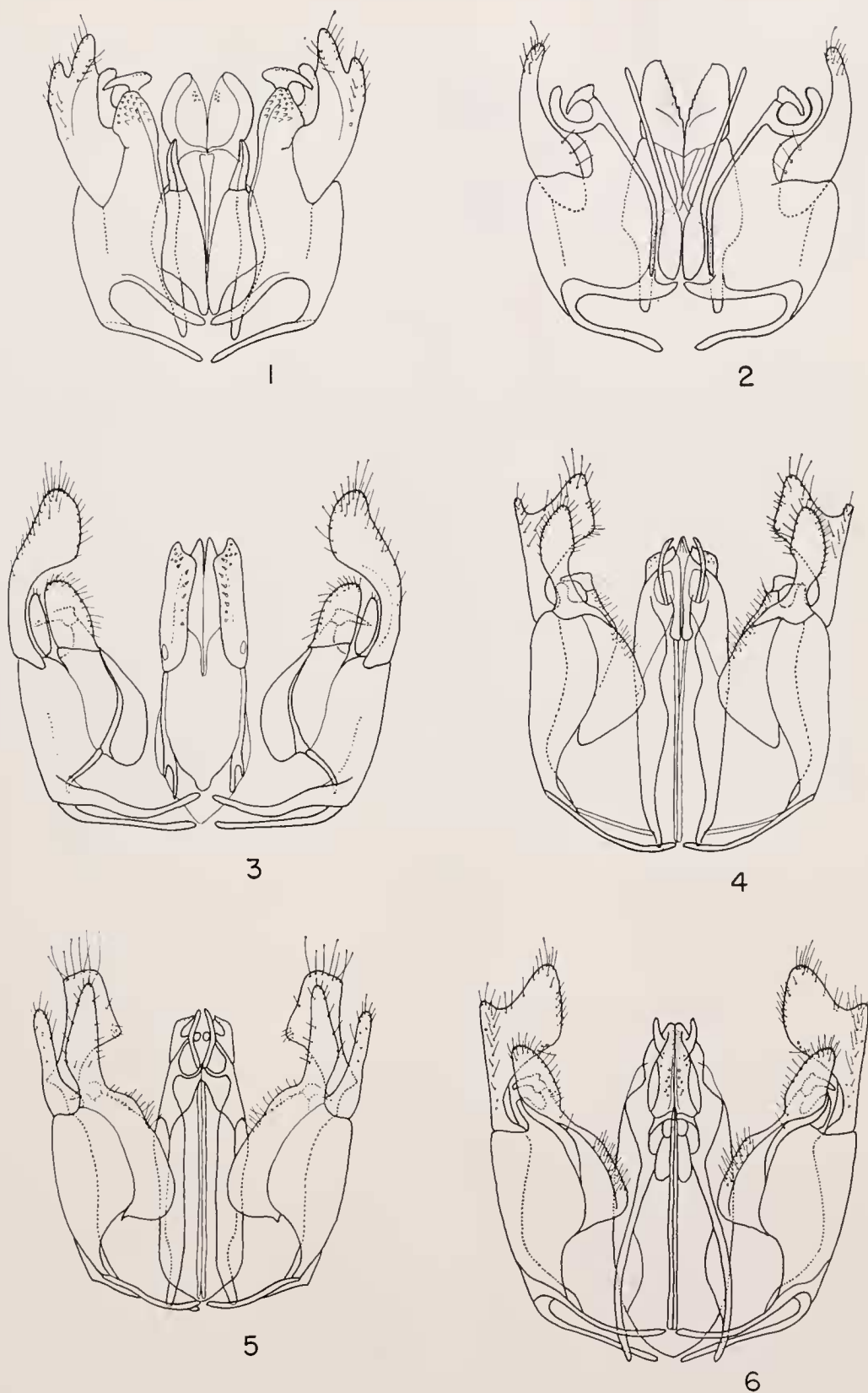
9. *Dissomphalus incomptus* EVANS

I described this species from eight males from Santa Catarina, Brazil, in my 1964 synopsis. Its presence in Paraguay and in two provinces of Argentina suggest that it is widely distributed and not uncommon in southern South America. The specimens before me key readily to this species in my 1966 paper⁵ and agree with the type series in most details, including the genitalia. They average somewhat larger (LFW 1.9-2.6 mm) and show minor variation in head measurements (WF $1.1-1.3 \times$ HE, OOL $1.15-1.30$ WOT). The sinuations beside the median process of the clypeus vary in development, such that in some specimens the clypeus may be said to be indistinctly tridentate.

Specimens examined. — PARAGUAY: 1 ♂, Carumbé, 1 Feb.-8 March 1966 (R. Golbach). ARGENTINA: 2 ♂♂, Oran, Abra Grande, Salta, 1 Jan.-7 Feb. 1967 (R. Golbach); 12 ♂♂, Horco Molle, San Xavier Mts., Tucumán, Jan.-June 1966 (L. Stange). Dec. 1967 (C. C. Porter).

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⁵ Acta Hymenopterologica, 2: 110.



Figs. 1-6. Male genitalia of *Apenesia* spp., ventral aspect. Fig. 1., *A. lilloana* n. sp. Fig. 2., *A. simulata* n. sp. Fig. 3., *A. laevicornis* n. sp. Fig. 4., *A. spatulata* n. sp. Fig. 5., *A. lacerata* n. sp. Fig. 6., *A. spinipes* n. sp.



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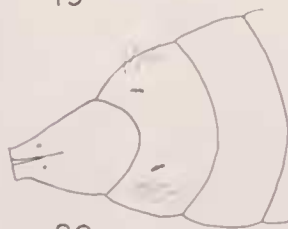
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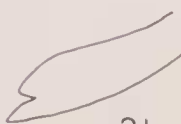
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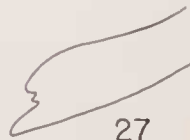
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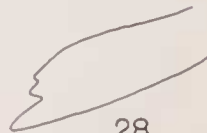
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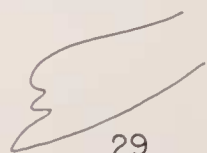
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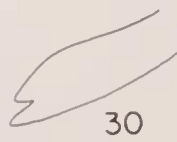
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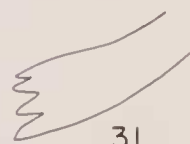
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Figs. 7-15. Clypeus of male *Apenesia* and *Dissomphalus*. Fig. 7., *A. lilloana* n. sp. Fig. 8., *A. simulata* n. sp. Fig. 9., *A. pygmaea* n. sp. Fig. 10., *A. inca* Evans. Fig. 11., *A. spatulata* n. sp. Fig. 12., *A. lacerata* n. sp. Fig. 13., *A. spinipes* n. sp. Fig. 14., *D. deformis* n. sp. Fig. 15., *D. bispinulatus* n. sp.

Figs. 16-20. Base of abdomen of male *Dissomphalus*, dorsal view. Fig. 16., *D. deformis* n. sp. Fig. 17., *D. ulceratus* n. sp. Fig. 18., *D. puteolus* n. sp. Fig. 19., *D. microstictus* n. sp. Fig. 20., *D. infissus* n. sp.

Figs. 21-31. Mandibles of male *Apenesia* and *Dissomphalus*. Fig. 21., *A. lilloana* n. sp. Fig. 22., *A. simulata* n. sp. Fig. 23., *A. pygmaea* n. sp. Fig. 24., *A. laevicornis* n. sp. Fig. 25., *A. spatulata* n. sp. Fig. 26., *A. spinipes* n. sp. Fig. 27., *D. deformis* n. sp. Fig. 28., *D. ulceratus* n. sp. Fig. 29., *D. puteolus* n. sp. Fig. 30., *D. microstictus* n. sp. Fig. 31., *D. teren* n. sp.